



## REVISIONES

### **Nursing diagnoses for patients with traumatic brain injury: integrative review**

Diagnósticos de enfermagem para pacientes com traumatismo cranioencefálico: revisão integrativa

Diagnósticos de enfermería para pacientes con traumatismo craneoencefálico: revisión integradora

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<https://doi.org/10.6018/eglobal.435321>

Received: 2/07/2020

Accepted: 10/01/2021

### **ABSTRACT:**

**Introduction:** Traumatic Brain Injury (TBI) is any impact that affects the head region involving the scalp, skull, brain and blood vessels, affecting these structures. Nursing professionals play a fundamental role during the care of these patients.

**Objective:** To list the Nursing Diagnoses (ND) of NANDA I that can be proposed for patients hospitalized with TBI.

**Method:** Integrative literature review, performed at the following databases: LILACS, BDNF, IBECs, MEDLINE, CINAHL, SCOPUS and WEB OF SCIENCE, using the search terms: “*Traumatismos Craniocerebrais/Craniocerebral Trauma*”, “*Diagnóstico de Enfermagem/Nursing Diagnosis*” and “*Enfermagem/Nursing*”. Articles in Portuguese, English and Spanish were included.

**Results:** The selection included 12 articles. From the reading of the studies, based on the clinical characteristics and the basic needs affected by patients with TBI, 18 ND were listed, organized alphabetically and according to their domain in NANDA I.

**Final considerations:** The findings of this research allowed characterizing important aspects related to the patient with TBI and bringing the literature approach on nursing diagnoses to this population. There is a gap in the investigations that address ND for patients with TBI, taking into account that a significant part of the studies report on the clinical manifestations perceived during nursing care and do not bring the elaborated diagnoses.

**Keywords:** Craniocerebral Trauma; Nursing Diagnosis; Nursing.

## RESUMO:

**Introdução:** Traumatismo Cranioencefálico (TCE) é qualquer impacto que atinge a região da cabeça envolvendo couro cabeludo, crânio, cérebro e vasos sanguíneos, afetando essas estruturas. Os profissionais de Enfermagem desempenham um papel fundamental durante a assistência a esses pacientes.

**Objetivo:** Elencar os Diagnósticos de Enfermagem (DE) da NANDA I que podem ser propostos para pacientes internados com TCE.

**Método:** Revisão integrativa da literatura, realizada nas bases de dados: LILACS, BDNF, IBECs, MEDLINE, CINAHL, SCOPUS e WEB OF SCIENCE, utilizando os termos de busca: "Traumatismos Craniocerebrais/Craniocerebral Trauma", "Diagnóstico de Enfermagem/ Nursing Diagnosis" e "Enfermagem/Nursing". Foram incluídos artigos nos idiomas português, inglês e espanhol.

**Resultados:** Foram selecionados 12 artigos. A partir da leitura dos estudos, com base nas características clínicas e nas necessidades básicas afetadas dos pacientes com TCE foram elencados 18 DE, estão organizados em ordem alfabética e de acordo com o domínio em que se encontra na NANDA I.

**Considerações finais:** Os achados dessa pesquisa possibilitaram caracterizar aspectos importantes relacionados ao paciente com TCE e trazer a abordagem da literatura sobre os diagnósticos de enfermagem a esse público. Percebe-se uma lacuna nas investigações que abordem os DE para pacientes com TCE, levando em consideração que uma parte significativa das pesquisas relatam sobre as manifestações clínicas percebidas durante o cuidado de enfermagem e não trazem os diagnósticos elaborados.

**Palavras-chave:** Traumatismos Craniocerebrais; Diagnóstico de Enfermagem; Enfermagem.

## RESUMEN:

**Introducción:** El trauma craneoencefálico (LCT) es cualquier impacto que afecta la región de la cabeza que involucra el cuero cabelludo, el cráneo, el cerebro y los vasos sanguíneos, afectando estas estructuras. Los profesionales de enfermería desempeñan un papel fundamental al ayudar a estos pacientes.

**Objetivo:** Enumerar los diagnósticos de enfermería (DE) de NANDA I que se pueden proponer para pacientes hospitalizados con LCT.

**Método:** Revisión integral de la literatura, realizada en las bases de datos: LILACS, BDNF, IBECs, MEDLINE, CINAHL, SCOPUS y WEB OF SCIENCE, utilizando los términos de búsqueda: "Traumatismo craneocerebral / craneocerebral", "Diagnóstico de enfermería / Diagnóstico de enfermería" y "Enfermagem / Enfermería". Se incluyeron artículos en portugués, inglés y español.

**Resultados:** Se seleccionaron 12 artículos. A partir de la lectura de los estudios, en función de las características clínicas y las necesidades básicas afectadas de los pacientes con LCT, 18 ED se enumeran, organizan en orden alfabético y de acuerdo con el dominio en el que se encuentran en NANDA YO.

**Consideraciones finales:** Los resultados de esta investigación permitieron caracterizar aspectos importantes relacionados con el paciente con LCT y llevar el enfoque de la literatura sobre diagnósticos de enfermería a esta audiencia. Hay una brecha en las investigaciones que abordan las DE para pacientes con LCT, teniendo en cuenta que una parte importante de la investigación informa sobre las manifestaciones clínicas percibidas durante la atención de enfermería y no aporta los diagnósticos elaborados.

**Palabras clave:** Trauma Craneocerebral; Diagnóstico de enfermería; Enfermería.

## INTRODUCTION

Traumatic Brain Injury (TBI) means any impact that affects the head region involving the scalp, skull, brain and blood vessels, affecting these structures. The lesion may start at the time of occurrence, being considered as primary, or after a few days or weeks, known as secondary injury. Moreover, it can be classified as an open or closed trauma, the latter occurring when the brain performs impacting movements within the skull cap at the time of the accident, causing internal changes<sup>(1)</sup>.

In Brazil, the TBI is associated with high levels of morbidity and mortality, being estimated that approximately 50% of hospitalizations are due to trauma, and the TBI is its largest representative, causing a great impact on public health services and people's lives, since, when the victim does not progress to death, the accident causes prolonged or permanent sequelae, requiring, according to the severity of the patient's condition, hospitalization, which directly interferes with the quality of life of the individuals<sup>(2)</sup>.

Several etiologies cause TBI, with automobile accidents as the most frequent. The increased number of vehicles, associated with the behavior of users and the lack of general supervision, has contributed to this. However, other causes also cause trauma, such as falls, urban violence, firearm accidents, running over and sportive accidents<sup>(3,4)</sup>.

The severity of TBI is defined by the trauma impact, and, according to the parameters obtained in the Glasgow Coma Scale, it can be classified as mild patients with scores between 13 and 15, score between 9 and 12 moderate and between 3 and 8 severe. This scale is used worldwide to assess the level of consciousness, patient evolution, neurological dysfunctions and standardizes language among professionals<sup>(5,6)</sup>.

The care of users of the health service with TBI involves a systematized, comprehensive and effective care, performing a detailed neurological evaluation that allows observing the alterations, structures and functions compromised; maintenance of physiological parameters such as: blood pressure, cerebral perfusion pressure, oxygen saturation and ventilation, with a view to starting treatment early and minimizing the risks of secondary injuries<sup>(7)</sup>.

Nursing professionals, as active members of the health team, play a fundamental role during the care of these patients, developing techniques and attitudes according to the needs presented by each patient. To guide the work of these professionals, the Systematization of Nursing Care (SNC) is the strategy to organize the service regarding the work method, instrument and personnel in all institutions that have nursing actions<sup>(8)</sup>.

The Nursing Process (NP) is one of the most used methods to organize and direct nursing care, being divided into five interconnected and recurrent stages, which are: data collection, preparation of nursing diagnoses, planning of interventions, implementation and evaluation. The nursing diagnosis (ND), as one of the stages of the NP, consists of grouping the information collected during the patient's complete anamnesis and identifying the affected human responses that require nursing interventions. The elaboration of the diagnoses is what will guide the definition of the care plan and the establishment of priorities at the time of care<sup>(9,10)</sup>.

To assist in the grouping of the collected data, the Taxonomy of Nursing Diagnoses of Nanda International (NANDA-I) is one of the languages of nursing that plays an important role for the profession, standardizing the terms used by the team, facilitating communication and developing nursing diagnostic research as a form of contribution to health care<sup>(11)</sup>.

Thus, it is essential that nurses have knowledge related to the care of patients who are victims of TBI in order to promote qualified nursing care. In this sense, the present study aimed to list the nursing diagnoses of NANDA I that can be proposed for patients hospitalized with TBI according to their affected basic needs verified during the care of the nursing team to these victims.

## METHOD

This is an integrative literature review, which proposes to group findings obtained in studies on a given subject, gathering comprehensive information and allowing a more reliable understanding of the theme in interest<sup>(12)</sup>. The steps proposed by Mendes, Silveira and Galvão<sup>(13)</sup> were followed in a systematized way: establishment of the research question; criteria for searches in the literature; categorization of studies; evaluation of the studies included in the review; interpretation of the results and presentation of the review.

For the development of the research, the following question was used: "What nursing diagnoses can be proposed to victims of traumatic brain injury?". Based on this research question, the Health Sciences Descriptors (DeCS), Medical Subject Headings (MeSH), inclusion and exclusion criteria of the articles were established.

For the selection of the articles, the following databases were used: Latin American and Caribbean Health Sciences Literature (LILACS), Nursing Database (BDENF), Spanish Bibliographic Health Sciences Index (IBECs), Medical Literature Analysis and Retrieval System Online (MEDLINE), Cumulative Index to Nursing and Allied Health Literature (CINAHL), SCOPUS and WEB OF SCIENCE.

The search was conducted in February and March 2020 through online access to the aforementioned databases. Inclusion criteria were: Free full text; publications in Portuguese, English and Spanish; main subject nursing diagnoses related to the patient who is victim of TBI. There was no limitation of the year of publication, considering that the TBI has always been a public health problem in Brazil and in the world, thus being configured in a timeless study. Duplicated articles were excluded.

The descriptors used were: *Traumatismos Craniocerebrais*, *Diagnóstico de Enfermagem* and *Enfermagem*, with their respective Medical Subject Headings (MeSH): Craniocerebral Trauma, Nursing Diagnosis and Nursing. The crossing between the terms was carried out using the Boolean operator AND and resulted in 856 publications, adding the production of all bases before the application of the inclusion criteria as shown in chart 1.

**Chart 1:** Search at LILACS, MEDLINE, BDNF, IBECS, CINAHL, SCOPUS and WEB OF SCIENCE databases according to the established inclusion criteria, Crato, Ceará, Brazil, 2020.

Databases	Publications found	Not fully available electronically	No approach of the studied theme	Duplicated	Selected
LILACS	8	6	1	0	1
MEDLINE	667	593	59	5	10
BDNF	0	0	0	0	0
IBECS	2	0	1	0	1
CINAHL	126	110	16	0	0
SCOPUS	51	49	2	0	0
WEB OF SCIENCE	2	0	1	1	0
TOTAL	856	758	80	6	12

Source: Created by the authors.

For data collection from the articles, a guide was used to expose the characteristics of the research: authors, article title, year of publication, language, indexed database, objective, level of evidence, type of study, study population and main findings.

The levels of evidence of the articles were classified as: I. Evidence from systematic reviews or meta-analysis of all randomized controlled clinical trials (RCCT) relevant to or from clinical guidelines based on systematic reviews of RCT; II. Evidence derived from at least one well-delineated RCCT; III. Evidence obtained from well-delineated clinical trials, without randomization; IV. Evidence from a case-control study or a well-delineated cohort study; V. Evidence from a systematic review of qualitative and descriptive studies; VI. Evidence derived from a single descriptive or qualitative study and VII. Evidence from the opinion of authorities and/or reports of expert committees<sup>(14)</sup>.

Based on the nursing diagnoses found during the reading of the articles and the changes in basic human needs affected in patients with TBI, the main ND that can be proposed to this population were listed. To prepare the nursing diagnoses, the NANDA I taxonomy of the current version of 2018-2020 was used.

The findings were analyzed, descriptively exposed and presented through charts, discussed reflectively according to the literature and the studied theme.

## RESULTS

In order to answer the main question of this research, 12 original articles were selected, organized according to the identification variables: authors, year of publication, title, objective (chart 2); and methodological design: level of evidence, type of study, population and main findings (chart 3).

Of the selected articles, ten were in English and are indexed in MEDLINE, and two in Spanish that were found in the IBECS and LILACS databases. The studies were published between 1991 and 2018, and most were published in 2018.

**Chart 2:** Characteristics of the selected studies. Crato, Ceará, Brazil, 2020.

<b>Authors/ Year of publication</b>	<b>Title</b>	<b>Objective</b>
Balba NM, Elliott JE, Weymann KB, et. al. 2018 <sup>(15)</sup>	Increased Sleep Disturbances and Pain in Veterans With Comorbid Traumatic Brain Injury and Posttraumatic Stress Disorder	To determine whether the elderly with Traumatic Brain Injury – TBI, posttraumatic stress disorder – PTSD and pain have a higher prevalence of sleep disorders.
Elliott JE, Opel RA, Weymann KB, et. al. 2018 <sup>(16)</sup>	Sleep Disturbances in Traumatic Brain Injury: Associations With Sensory Sensitivity	To identify the relationship between sleep disorders and sensory alterations and sensitivity in the elderly after traumatic brain injury (TBI).
Nordhaug LH, Hagen K, Vik A, et. al. 2018 <sup>(17)</sup>	Headache following head injury: a population-based longitudinal cohort study (HUNT)	To analyze data on initial headache or exacerbation of headache in patients with traumatic brain injury.
Yang Y, Chien WC, Chung CH, et. al. 2018 <sup>(18)</sup>	Risk of Erectile Dysfunction After Traumatic Brain Injury: A Nationwide Population-Based Cohort study in Taiwan	To clarify the association between traumatic brain injury (TBI) and erectile dysfunction (ED).
Ren D, Junho F, Puccio AV, et. al. 2017 <sup>(19)</sup>	Group-Based Trajectory Analysis of Emotional Symptoms among Survivors after Severe Traumatic Brain Injury	To characterize changes in depressive symptoms, anxiety and life satisfaction in survivors of severe TBI.
Lund SB, Gjeilo KH,	Moderate traumatic brain injury, acute phase course and	To describe the severity of the injury and the course of



Moen KG, et. al. 2016 <sup>(20)</sup>	deviations in physiological variables: an observational study	the acute phase during the first three days after the injury in a cohort of patients with moderate TBI.
Albrecht JS, Kiptanui Z, Tsang Y, et. al. 2014 <sup>(21)</sup>	Depression among older adults after traumatic brain injury: a national analysis.	To estimate the incidence rates of depression after hospital discharge for TBI in Medicare beneficiaries aged $\geq 65$ years, quantify the increased risk of depression after TBI and assess the risk factors for incident depression after TBI.
Thompson HJ, Kirkness CJ, Mitchell PH. 2013 <sup>(22)</sup>	Hypothermia and Rapid Rewarming Is Associated With Worse Outcome Following Traumatic Brain Injury.	To determine the prevalence and degree of hypothermia in a sample of patients with TBI at the time of admission to the emergency department.
Thompson HJ, Pinto MJ, Bullock MR. 2003 <sup>(23)</sup>	Neurogenic fever after traumatic brain injury: an epidemiological study.	To determine the incidence of neurogenic fever in a population of patients in the acute phase after severe traumatic brain injury.
Kinsella G, Packer S, Olver, J. 1991 <sup>(24)</sup>	Maternal reporting of behavior following very severe blunt head injury	To describe the behavior and profile of victims of traumatic brain injury (TBI).
López C, Pérez MAM, Sánchez CM, et. al. 2014 <sup>(25)</sup>	Pain assessment of tracheal suctioning on brain injury patients by pain behavioral indicator scale (ESCID)	To evaluate the response to pain in patients with moderate to severe TBI before performing tracheal aspiration.
García IFG, Rodríguez AA,	<i>Labor de enfermería en el traumatismo craneoencefálico infantil</i>	To analyze the behavior of traumatic brain injuries in pediatrics and evaluate the

Rodríguez JCH, et. al. 2003 <sup>(26)</sup>	application of the nursing care process.
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Source: Created by the authors.

**Chart 3:** Methodological design of the selected studies. Crato, Ceará, Brazil, 2020.

Authors	Level of evidence	Type of study	Population	Main findings
Balba NM, Elliott JE, Weymann KB, et. al. 2018 <sup>(15)</sup>	VI	Cross-sectional study	639 participants, 256 patients with TBI and PTSD and 386 without any of the comorbidities.	Pain: 89 (34.7%); sleep disorder: 204 (79.6%); anxiety symptoms: 142 (55.4%)
Elliott JE, Opel RA, Weymann KB, et. al. 2018 <sup>(16)</sup>	VI	Cross-sectional study	95 participants (medical records).	Pain: 63 (66.31%); anxiety: 18 (18.94%); sleep disorder: 27 (28.42%).
Nordhaug LH, Hagen K, Vik A, et. al. 2018 <sup>(17)</sup>	IV	Cohort study	294 hospitalized patients with TBI.	Pain: 240 (81.6%).
Yang Y, Chien WC, Chung CH, et. al. 2018 <sup>(18)</sup>	IV	Cohort study	72,642 patients diagnosed with TBI.	Anxiety: 752 (1.04%); skin lesions: 28,978 (39.8%); erectile dysfunction: 64 (0.088%).
Ren D, Junho F, Puccio AV, et. al. 2017 <sup>(19)</sup>	IV	Prospective cohort study	129 adults with severe TBI.	Anxiety: 102 (79%); fatigue: 39 (30%); low self-esteem: 89 (69%).
Lund SB, Gjeilo KH, Moen KG, et. al. 2016 <sup>(20)</sup>	IV	Retrospective cohort study	119 patients participated in the research	Altered blood glucose levels: 77 (65%); hyperthermia: 70 (59%); hypovolemia: 63 (53%); dyspnea: 68 (57%).
Albrecht JS, Kiptanui Z, Tsang Y, et. al. 2014 <sup>(21)</sup>	IV	Retrospective cohort study	67,347 patients hospitalized for TBI from 2006 to 2010 who survived hospital discharge and were not	Fatigue: 11,441 (16.98%).



			diagnosed with depression before the study period.	
Thompson HJ, Kirkness CJ, Mitchell PH. 2013 <sup>(22)</sup>	VI	Descriptive study	147 patients admitted to a trauma center after severe TBI from January 2000 to January 2002.	Hypothermia: 59 (40%).
Thompson HJ, Pinto MJ, Bullock MR. 2003 <sup>(23)</sup>	IV	Retrospective cohort study	76 Patients with traumatic brain injuries.	Hyperthermia: 11 (14.5%).
Kinsella G, Packer S, Olver, J. 1991 <sup>(24)</sup>	IV	Retrospective cohort study	40 individuals who suffered a severe closed traumatic brain injury.	Memory changes: 22 (55%); difficulty to verbalize: 17 (43%); impaired physical mobility: 12 (30%).
López C, Pérez MAM, Sánchez CM, et. al. 2014 <sup>(25)</sup>	IV	Retrospective cohort study	27 patients with traumatic brain injury (TBI)	Pain: 27 (100%).
García IFG, Rodríguez AA, Rodríguez JCH, et. al. 2003 <sup>(26)</sup>	VI	Descriptive study	26 patients who suffered traumatic brain injuries and were admitted to an intensive care unit of a pediatric hospital.	Impaired verbal communication: 12 (46.2%); ineffective breathing pattern: 10 (38.5%); impaired physical mobility: 8 (30.8%); acute pain: 7 (26.9%); hyperthermia: 6 (23.1%); ineffective thermoregulation: 4 (15.4%); risk of infection: 26 (100%).

Source: Created by the authors.

From the reading of the articles, based on the clinical characteristics and the affected basic needs of patients with TBI, 18 ND were listed, as shown in Chart 4, organized alphabetically and according to their domain in NANDA I.

**Chart 4:** Nursing Diagnoses of NANDA I version 2018-2020 listed according to the clinical characteristics of patients with TBI found in the selected articles. Crato, Ceará, Brazil, 2020.

<b>NURSING DIAGNOSES' TITLE</b>	<b>DOMAIN</b>
Anxiety	9 - Coping/stress tolerance
Low situational self-esteem	6 - Self-perception
Impaired verbal communication	5 - Perception/cognition
Sexual dysfunction	8 - Sexuality
Sleep pattern disorder	4 - Activity/rest
Acute pain	12 - Comfort
Fatigue	4 - Activity/rest
Hyperthermia	11 - Safety/protection
Hypothermia	11 - Safety/protection
Impaired skin integrity	11 - Safety/protection
Impaired memory	5 - Perception/cognition
Impaired physical mobility	4 - Activity/rest
Ineffective breathing pattern	4 - Activity/rest
Risk of unstable blood glucose	2 - Nutrition
Risk of infection	11 - Safety/protection
Ineffective thermoregulation	11 - Safety/protection
Impaired gas exchange	3 - Elimination and exchange
Deficient liquid volume	2 - Nutrition

Source: Created by the authors.

## DISCUSSÃO

The articles address the profile of patients with TBI, the care to these individuals at health services, clinical characteristics presented during the evaluation by nursing professionals and portray information that provides support for the elaboration of a reflective critical thinking by the team in the establishment of nursing diagnoses that affects people victims of TBI.

The practice of the nursing process as a methodological instrument of work in health services is of fundamental importance, because it guides the actions to be carried out by nursing professionals, standardizes the dialogue between those involved in care, values the category when appropriating something that is private in the performance of their work and allows applying the scientific technical knowledge of nursing<sup>(27)</sup>.

The passage through traumatic events that result in damage to health causes stress in people's lives. Patients with TBI tend to present psychological changes after injury that may even interfere with the normal sleep pattern. The ND found related to these alterations were mainly anxiety, unstable emotional control, impaired memory, low situational self-esteem and sleep pattern disorder<sup>(15, 16, 18, 19, 24)</sup>.

When considering patients victims of accidents that cause physical injuries, the health team's concern often focuses on meeting these impacts, normally disregarding or missing other important aspects related to the person's coping and acceptance during treatment and passage through such a situation. A significant finding was observed in the number of people with TBI who, after the trauma, presented anxiety, showing that,

although it is a feeling frequently reported by the general population currently, it bothers and interferes with the quality of life of individuals, because not all are prepared to deal with concerns<sup>(15, 16, 18, 19)</sup>.

Regarding physical impairments, the ones that most caused instability in the condition were: altered respiratory pattern, impaired gas exchange resulting in poor tissue perfusion, impaired verbal communication, impaired physical mobility, deficient fluid volume and impaired skin integrity, thus favoring the risk of infections<sup>(18, 20, 24, 26)</sup>.

Acute pain was also a frequent diagnosis verified during care. Although, in some patients, this parameter was tested during nursing procedures, such as tracheal aspiration, pain is commonly observed in trauma victims and evidence shows that some factors, such as mobilization and execution of techniques, influence its perception by the patient<sup>(16, 17, 25, 26)</sup>. This demonstrates that pain control measures are essential to provide the best possible comfort to patients, especially in trauma victims, who have severe repercussions and acute pain.

A study conducted in southern Brazil in 2015 sought to know the factors that act in the perception of acute pain and the consequences of this experience in patients victims of mild trauma, unveiling that trauma-related acute pain can be influenced by factors of various orders: biological, emotional, spiritual and sociocultural. Furthermore, the alterations highlighted are from biological impairments, such as tachycardia and dyspnea, even emotional, such as nervousness, confusion, despair and feeling of impotence<sup>(28)</sup>.

Other nursing diagnoses found, such as hyperthermia and ineffective thermoregulation, have important characteristics to be investigated during physical evaluation and vital signs in patients with TBI. In the victims of severe TBI, during the acute phase of the injury, temperature change occurs frequently, including the incidence of neurological fever and the risk of developing it, because severe TBI is assumed to be associated with lower GCS scores and lesions in deep brain structures such as the hypothalamus, thermoregulatory center<sup>(20, 23, 26)</sup>.

The effects of hypothermia on the patient were also investigated and, since people arriving at the health service after suffering a TBI with hypothermia presented lower values on the Glasgow scale, the hospitalization period was prolonged and the mortality rate was higher<sup>(22)</sup>. For patients who demonstrated temperature changes, the proposed ND were: Hyperthermia, hypothermia and ineffective thermoregulation, all included in domain 11 of NANDA-I regarding safety/protection.

Thus, TBI causes significant changes in people's lives, including changes in lifestyle and important functions of the body. Considering this, upon listing nursing diagnoses, the team directs care to solve the problem and promotes quality care, individually meeting patients and their affected basic needs.

## CONCLUSION

The findings of this research allowed characterizing important aspects related to the patient with TBI and bringing the literature approach on nursing diagnoses to this population. Although the number of articles included is considerable, there is a gap in

the investigations that address ND for patients with TBI, taking into account that a significant part of the studies report on the clinical manifestations perceived during nursing care and do not bring the diagnoses elaborated. It was possible to verify that most publications had a cohort design, classified as level of evidence IV.

Eighteen NANDA-I nursing diagnoses were listed based on clinical characteristics, affected basic needs of patients with TBI and information from selected studies. The diagnoses of domain 11 - safety/protection were more frequent, being entitled: Hyperthermia, hypothermia, impaired skin integrity and ineffective thermoregulation.

There was a distribution in relation to the nursing diagnoses found related to the physical and emotional aspects of patients, revealing the importance of an integral, individualized evaluation and consistent with the compromised real basic human needs, in order to minimize the sequelae resulting from trauma and ensure greater quality during care.

The strengthening of nursing depends on professional performance in the work environment and on his/her work and appropriation of the methods that organize his/her care. From this perspective, nurses should develop more studies focused on nursing diagnoses in patients who are victims of TBI, in order to contribute to the proper management and care offered to this portion of the population.

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ISSN 1695-6141

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